

Insects complex associated with the tropical basil, *Ocimum gratissimum* L. (Lamiaceae) in southern Benin.

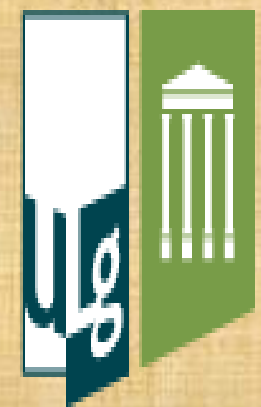
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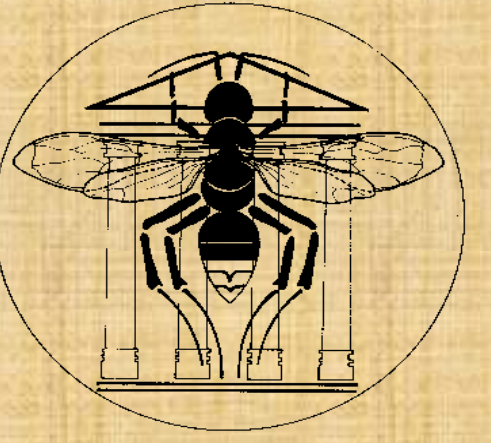
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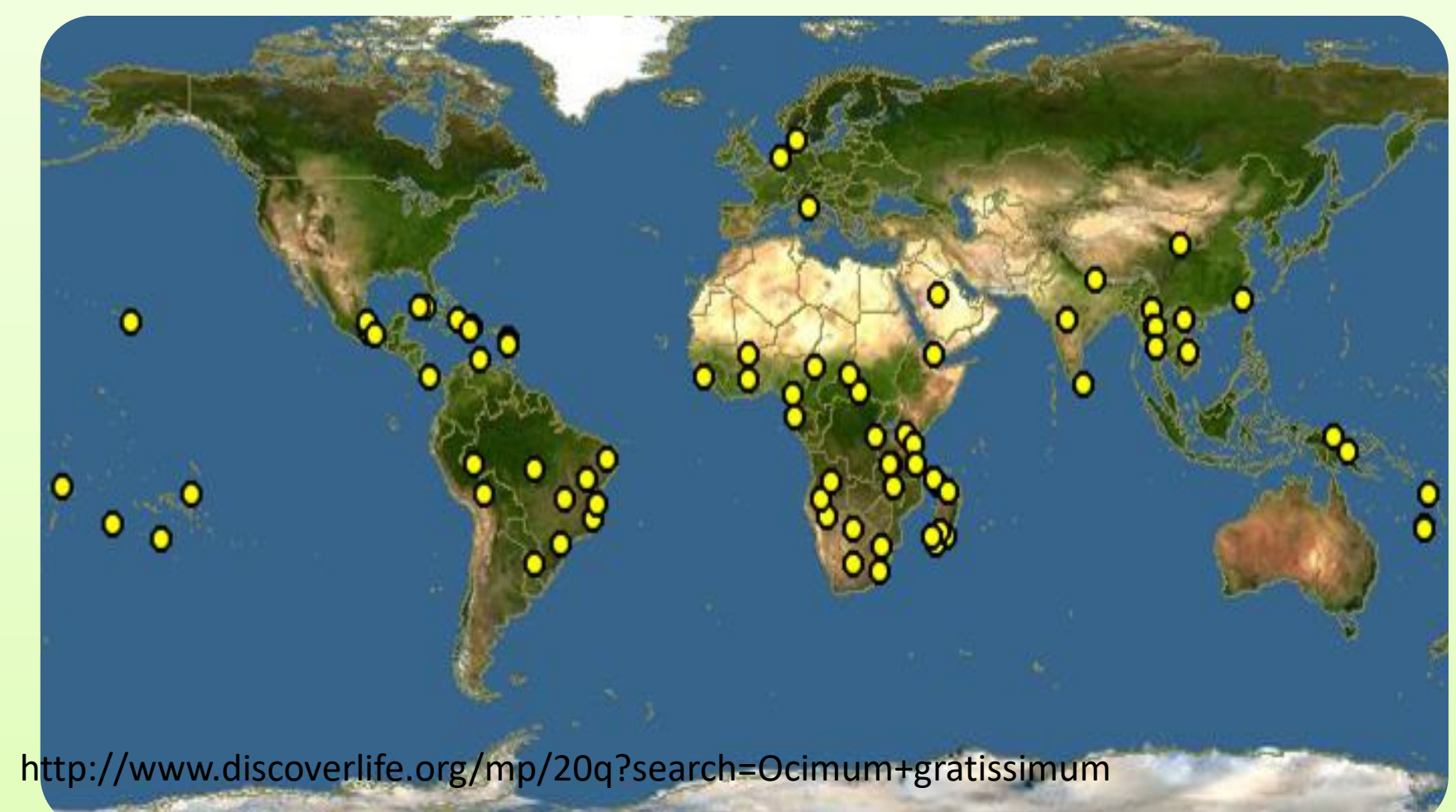


General information about Tropical basil

Tropical basil is an aromatic, perennial herb. Plant and the essential oil have many applications in traditional medicine and are used as pesticides on crops pests and diseases. In several west Africa countries this plant is used as vegetable crops. In Benin, It's produced on almost all urban and periurban garden throughout the year for fresh market. The aim of this study is to asses the arthropod community of tropical basil in southern Benin.



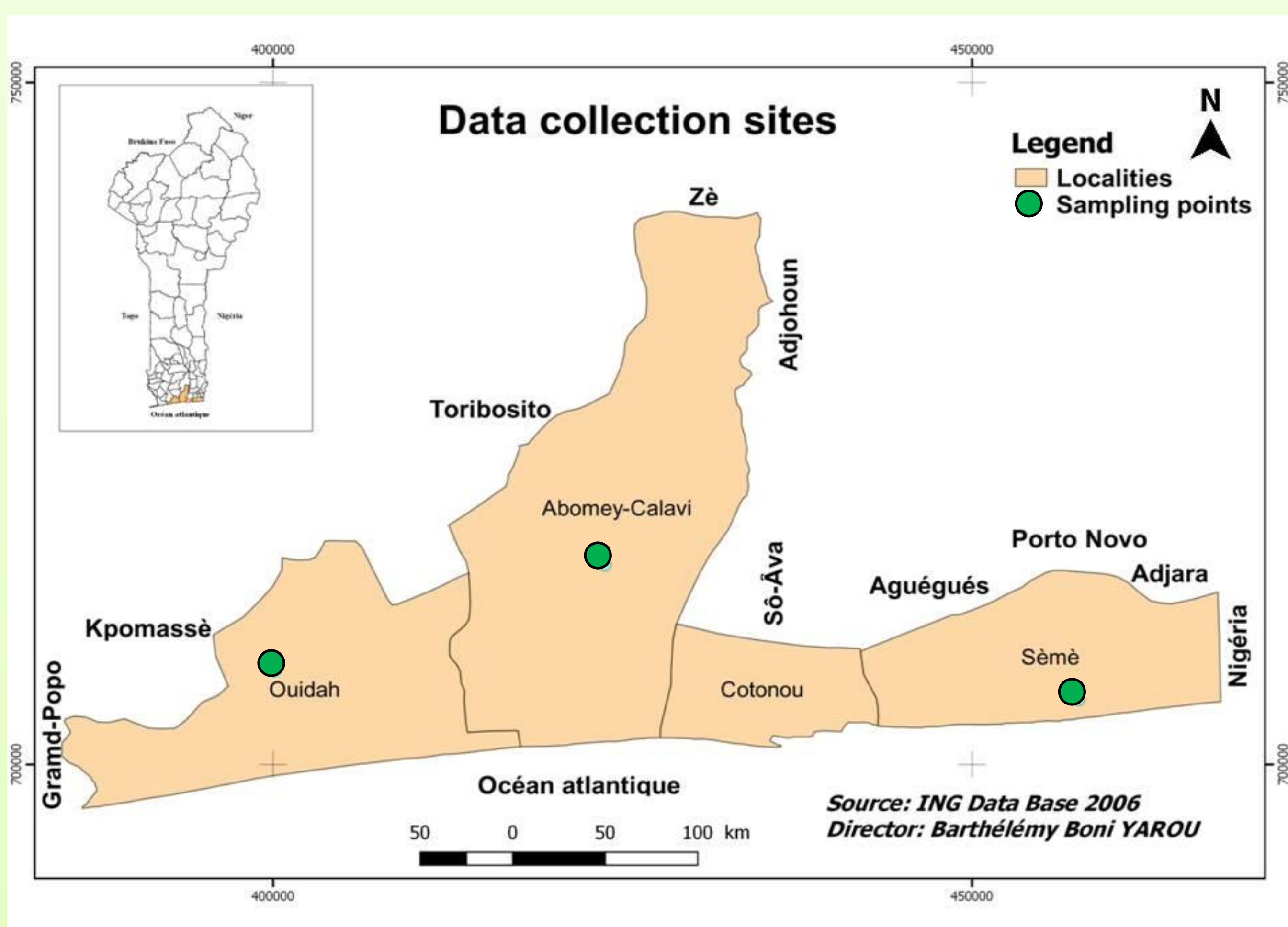
O. gratissimum plots in garden



Worldwide distribution

Collect and identification

Arthropod were mowed using a sweep net in three localities of southern Benin. The insects were kept in alcohol before identification.



Map of collection localities : Ouidah, Abomey-Calavi (Togba) and Sèmè



Mowed in basil plots



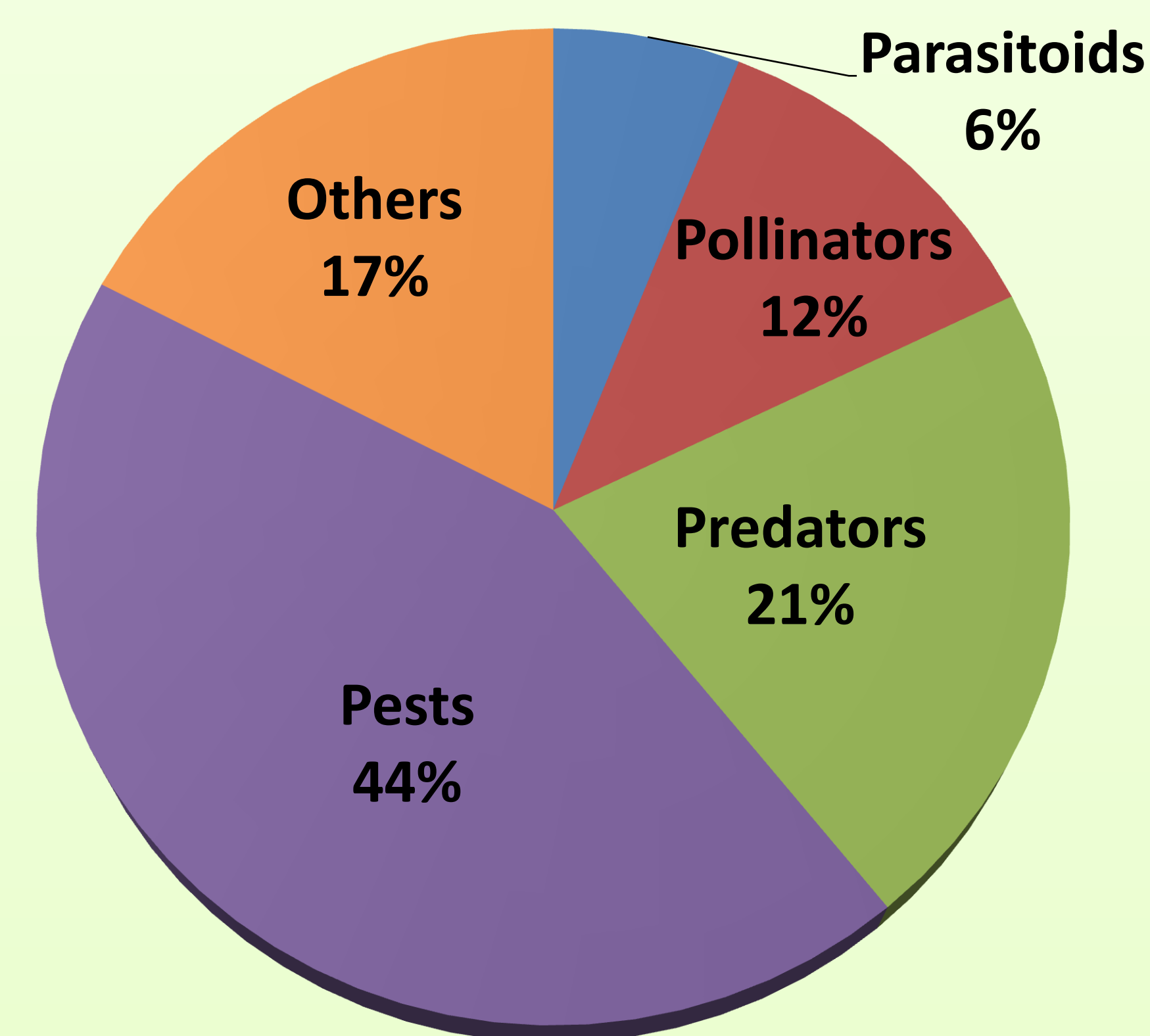
Identification

Insects identified

Insects were identified at the taxonomic level of the family.

■ **1365** insects were treated.

■ **44 families** grouped in **7 orders** were identified.



Functional groups

Order	Number of families
Hymenoptera	15
Heteroptera	9
Diptera	6
Coleoptera	5
Homoptera	4
Orthoptera	4
Mantoptera	1
Total	44



Chalcididae



Braconidae



Apidae



Megachilidae

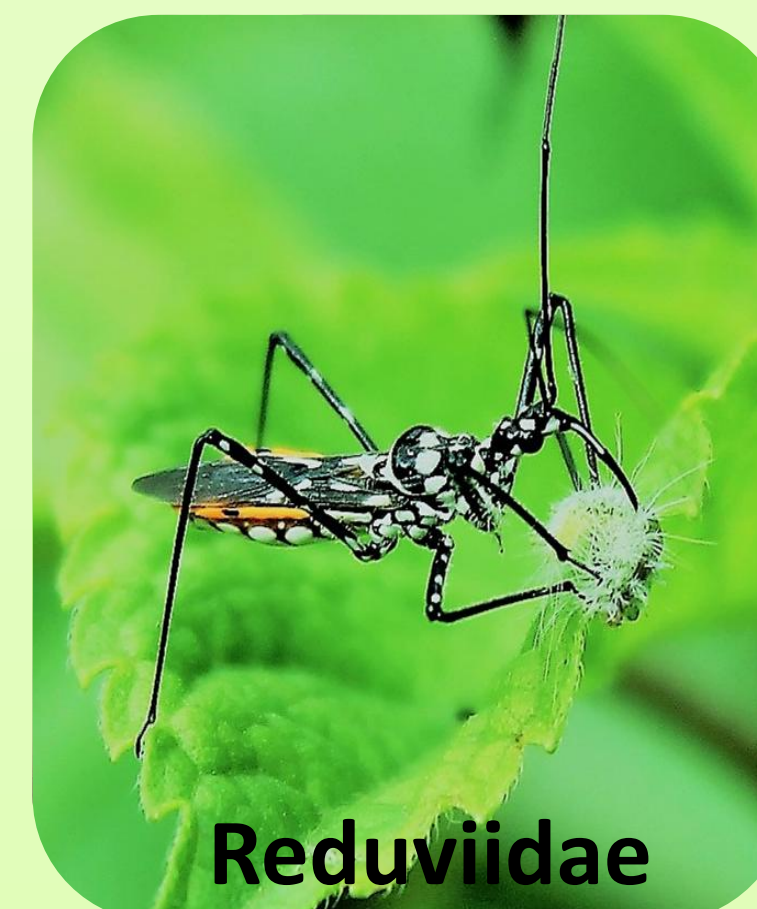
Parasitoids

Pollinators



Membracidae

Other



Reduviidae



Syrphidae

Predators



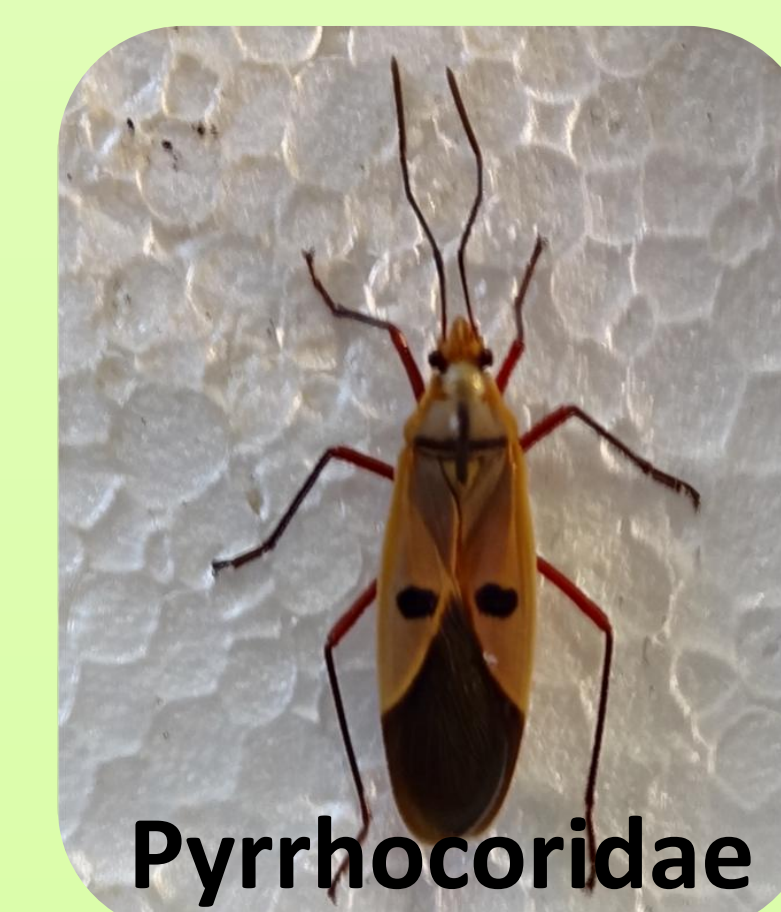
Coccinellidae



Pyrgomorphidae



Aphididae



Pyrrhocoridae

Pests



Chrysomelidae

Conclusion and prespectives

- It appeared that, there is a large diversity of families and functional groups associated with tropical basil.
- Continue the identification until the species level;
- Study the spatio temporal variability and the dynamics.